

**IN THE SPECIFICATION:**

Please amend page 13 of the specification to be as follows:

a1 the part in a particular (raster) pattern, as shown by the arrow indicating the path of the burnishing member. The normal force ( $F_z$ ) being applied to the burnishing member is varied to increase or decrease the pressure being exerted against the surface of the part. While **FIG. 4** shows a linear variation in the normal force and the corresponding pressure being applied against the surface, parallel (X-direction) and perpendicular (Y-direction) to the direction of burnishing, it should now be apparent to those skilled in the art that the pattern of burnishing and the form and rate of reduction or increase in pressure being exerted against the surface can be controlled to provide a wide variety of residual stress distributions and magnitude of compression.

Referring to **FIG. 5**, another illustration of the method of the present invention is shown whereby variations in residual stress distribution may also be achieved by varying the pattern of burnishing, independently or in conjunction with variations in burnishing pressure. As shown, the spacing along the X-direction, perpendicular to the direction of travel of the burnishing member, has been varied to increase and decrease the spacing between each pass of the burnishing member thereby changing the the density ( $D_x$ ) of burnishing (spacing density). As shown, the spacing between each pass of the burnishing member varies linearly, however, it should now be apparent to those skilled in the art that other burnishing patterns may be selected to produce the desired residual stress distribution.

Referring to **FIG. 6**, another pattern of burnishing is shown whereby the density of burnishing ( $D_x$ ) is varied in two dimensions (X and Y directions) as a function of the length of the burnishing pass, in order to produce the desired stress distribution for the part being burnished.

Referring to **FIG. 7**, another pattern of burnishing is shown whereby a region is designated and the magnitude of compression and the residual stress distribution is selected that optimizes the fatigue performance of the part. As shown, the residual stress distribution has a symmetrical pattern such as what would be preferred for use around